

WHAT IS CLAIMED IS:

1           1.       A method for providing user location information for a personal information  
2       management program, comprising:

3 generating position coordinates of a wireless device and time information indicating a  
4 time when the position coordinates were generated, wherein a user is associated with the  
5 wireless device; and

6 processing the position coordinates and time information to determine information on  
7 locations and associated time periods, wherein for each determined location and associated  
8 time period, the user of the wireless device was located at the location for the associated time  
9 period.

1                   2.       The method of claim 1, wherein the position coordinates and time information  
2       are generated at the wireless device, further comprising:

3 transmitting the generated position coordinates and time information to a server; and  
4 storing, with the server, the generated position coordinates and time information in a  
5 database, wherein the server processes the position coordinates and time information to  
6 determine the locations and associated time periods where the user was present.

1           3.       The method of claim 1, wherein the position coordinates and time information  
2       are generated at the wireless device, wherein the wireless device processes the position  
3       coordinates and time information to determine the locations and associated time periods where  
4       the user was present, further comprising:

5 transmitting, with the wireless device, the determined locations and associated time  
6 periods to a server;

7 storing, with the server, the determined locations and time periods in a database.

1       4.       The method of claim 1, further comprising:  
2           providing a plurality of location boundaries defining multiple location coordinates;  
3           for each location boundary, providing a location description including information  
4           describing the location boundary;  
5           for each generated position coordinate, determining whether the position coordinate is  
6           included in one of the provided location boundaries, wherein at least one determined location  
7           comprises one predefined location boundary including position coordinates, and wherein the  
8           information generated on the at least one location includes the location description for the  
9           predefined location boundary comprising the location.

1       5.       The method of claim 4, wherein at least one location boundary and associated  
2       location description is provided by:  
3           receiving position coordinates from the wireless device defining one location boundary;  
4       and  
5           receiving a location description from the wireless device for the defined location  
6       boundary.

1       6.       The method of claim 4, wherein at least one location boundary and associated  
2       location description is provided by:  
3           receiving location boundary and location description information from a transmitter.

1       7.       The method of claim 6, further comprising:  
2           associating, with the wireless device, the location description information with the  
3           generated position coordinates within the location boundary received from the transmitter; and  
4           transmitting, with the wireless device, the position coordinates, associated time  
5           information, and associated location description to a server, wherein the server processes the  
6           position coordinates and time information to determine location boundaries including the

7 position coordinates, and wherein the information generated on the locations includes the  
8 location description provided by the transmitter for the location boundary comprising the  
9 location.

1 8. The method of claim 1, wherein position coordinates and time information are  
2 generated by multiple wireless devices, wherein each wireless device is associated with one  
3 user, further comprising:

4 receiving position coordinates and time information from multiple wireless devices; and  
5 storing the position coordinates and time information in a database with information  
6 associating each position coordinate and time information with one user.

1 9. The method of claim 8, wherein processing the position coordinates and time  
2 information to determine information on locations and associated time periods further  
3 comprises:

4 for each user, determining a series of position coordinates included within one  
5 predefined location boundary, wherein a location description is associated with each predefined  
6 location boundary, and wherein the determined location comprises the predefined location  
7 boundary including the series of position coordinates, and wherein the information generated on  
8 the locations includes the location description.

1 10. The method of claim 1, further comprising:  
2 processing the position coordinates and time information to determine whether a change  
3 in a series of position coordinates indicates a predefined activity occurring during an activity  
4 time period during which the position coordinates were generated;  
5 determining activity time periods that are within the selected time interval; and  
6 generating information on the predefined activities for activity time periods within the  
7 selected time interval.

1        11.    The method of claim 1, further comprising:  
2            receiving a request for information on the user for a selected time interval;  
3            determining time periods associated with locations that are within the selected time  
4    interval; and  
5            generating information on the locations and associated time periods that are within the  
6    selected time interval.

1        12.    The method of claim 11, further comprising:  
2            transmitting the generated information to an initiator of the request for information to  
3    enable the initiator to display the location information and time periods where the user of the  
4    wireless device was located for the time interval.

1        13.    The method of claim 12, wherein the initiator requesting the information  
2    comprises a program installed on a computer, and wherein the generated information is  
3    transmitted over the Internet to the computer.

1        14.    The method of claim 12, wherein the initiator requesting the information is the  
2    wireless device, and wherein the wireless device displays the generated information for the  
3    requested time interval.

1        15.    The method of claim 12, further comprising:  
2            determining scheduled events for the user within the time interval; and  
3            generating information on the scheduled events within the time interval to enable the  
4    initiator to display information on the scheduled events along with the geographic locations  
5    where the user was located during the time interval.

1           16.    The method of claim 1, wherein each position coordinate is expressed as an x,  
2    y, z coordinate.

1           17.    The method of claim 1, further comprising:  
2           providing information on the determined locations comprising one of at least text, audio,  
3    image, and video.

1           18.    A method for generating a calendar for a personal information management  
2    program, comprising:  
3           receiving selection of a time interval;  
4           for the selected time interval, determining position coordinates of a wireless device and  
5    time information indicating a time when the position coordinates were generated, wherein a user  
6    is associated with the wireless device; and  
7           processing the position coordinates and time information to determine information on  
8    locations and associated time periods, wherein for each determined location and associated  
9    time period, the user of the wireless device was located at the location for the associated time  
10   period;  
11           displaying information on the determined locations and time periods where the user of  
12   the wireless device was located for the selected time interval.

1           19.    The method of claim 18, further comprising:  
2           determining scheduled events for the user within the selected time interval; and  
3           displaying information on the scheduled events within the time interval adjacent to the  
4    displayed information on the determined locations and time periods where the user was located  
5    for the selected time interval.

1           20.     The method of claim 18, wherein the selected time interval comprises a selected  
2     time period of a user selected day.

1           21.     The method of claim 18, wherein the selected time interval comprises a default  
2     time period for a current day.

1           22.     The method of claim 18, wherein the information is displayed in a calendar  
2     Graphical User Interface (GUI).

1           23.     A system for providing user location information for a personal information  
2     management program, comprising:

3           means for generating position coordinates of a wireless device and time information  
4     indicating a time when the position coordinates were generated, wherein a user is associated  
5     with the wireless device; and

6           means for processing the position coordinates and time information to determine  
7     information on locations and associated time periods, wherein for each determined location and  
8     associated time period, the user of the wireless device was located at the location for the  
9     associated time period.

1           24.     The system of claim 23, wherein the position coordinates and time information  
2     are generated at the wireless device, further comprising:

3           means for transmitting the generated position coordinates and time information to a  
4     server; and

5           means for storing, with the server, the generated position coordinates and time  
6     information in a database, wherein the server processes the position coordinates and time  
7     information to determine the locations and associated time periods where the user was present.

1           25.    The system of claim 23, wherein the position coordinates and time information  
2    are generated at the wireless device, wherein the wireless device includes the means for  
3    processing the position coordinates and time information to determine the locations and  
4    associated time periods where the user was present, further comprising:  
5            means for transmitting, with the wireless device, the determined locations and  
6    associated time periods to a server; and  
7            means for storing, with the server, the determined locations and time periods in a  
8    database.

1           26.    The system of claim 23, further comprising:  
2            means for providing a plurality of location boundaries defining multiple location  
3    coordinates;  
4            means for providing, for each location boundary, a location description including  
5    information describing the location boundary;  
6            means for determining, for each generated position coordinate, whether the position  
7    coordinate is included in one of the provided location boundaries, wherein at least one  
8    determined location comprises one predefined location boundary including position  
9    coordinates, and wherein the information generated on the at least one location includes the  
10   location description for the predefined location boundary comprising the location.

1           27.    The system of claim 26, wherein the means for providing the location  
2    boundaries and associated location descriptions performs:  
3            receiving position coordinates from the wireless device defining one location boundary;  
4    and  
5            receiving a location description from the wireless device for the defined location  
6    boundary.

1        28.    The system of claim 26, wherein the means for providing the location  
2    boundaries and associated location descriptions performs:  
3            receiving location boundary and location description information from a transmitter.

1        29.    The system of claim 28, further comprising:  
2            means for associating, with the wireless device, the location description information with  
3    the generated position coordinates within the location boundary received from the transmitter;  
4    and  
5            means for transmitting, with the wireless device, the position coordinates, associated  
6    time information, and associated location description to a server, wherein the server processes  
7    the position coordinates and time information to determine location boundaries including the  
8    position coordinates, and wherein the information generated on the locations includes the  
9    location description provided by the transmitter for the location boundary comprising the  
10   location.

1        30.    The system of claim 23, wherein position coordinates and time information are  
2    generated by multiple wireless devices, wherein each wireless device is associated with one  
3    user, further comprising:  
4            means for receiving position coordinates and time information from multiple wireless  
5    devices; and  
6            means for storing the position coordinates and time information in a database with  
7    information associating each position coordinate and time information with one user.

1        31.    The system of claim 30, wherein the means for processing the position  
2    coordinates and time information to determine information on locations and associated time  
3    periods further performs:

4 for each user, determining a series of position coordinates included within one  
5 predefined location boundary, wherein a location description is associated with each predefined  
6 location boundary, and wherein the determined location comprises the predefined location  
7 boundary including the series of position coordinates, and wherein the information generated on  
8 the locations includes the location description.

1 32. The system of claim 23, further comprising:  
2 means for processing the position coordinates and time information to determine  
3 whether a change in a series of position coordinates indicates a predefined activity occurring  
4 during an activity time period during which the position coordinates were generated;  
5 means for determining activity time periods that are within the selected time interval; and  
6 means for generating information on the predefined activities for activity time periods  
7 within the selected time interval.

1 33. The system of claim 23, further comprising:  
2 means for receiving a request for information on the user for a selected time interval;  
3 means for determining time periods associated with locations that are within the selected  
4 time interval; and  
5 means for generating information on the locations and associated time periods that are  
6 within the selected time interval.

1 34. The system of claim 33, further comprising:  
2 means for transmitting the generated information to an initiator of the request for  
3 information to enable the initiator to display the location information and time periods where the  
4 user of the wireless device was located for the time interval.

1        35.    The system of claim 34, wherein the initiator requesting the information  
2    comprises a program installed on a computer, and wherein the generated information is  
3    transmitted over the Internet to the computer.

1        36.    The system of claim 34, wherein the initiator requesting the information is the  
2    wireless device, and wherein the wireless device displays the generated information for the  
3    requested time interval.

1        37.    The method of claim 34, further comprising:  
2            means for determining scheduled events for the user within the time interval; and  
3            means for generating information on the scheduled events within the time interval to  
4    enable the initiator to display information on the scheduled events along with the geographic  
5    locations where the user was located during the time interval.

1        38.    The system of claim 23, wherein each position coordinate is expressed as an x,  
2    y, z coordinate.

1        39.    The system of claim 23, further comprising:  
2            means for providing information on the determined locations comprising one of at least  
3    text, audio, image, and video.

1        40.    A system for generating a calendar for a personal information management  
2    program, comprising:  
3            means for receiving selection of a time interval;  
4            means for determining, for the selected time interval, position coordinates of a wireless  
5    device and time information indicating a time when the position coordinates were generated,  
6    wherein a user is associated with the wireless device; and

7 means for processing the position coordinates and time information to determine  
8 information on locations and associated time periods, wherein for each determined location and  
9 associated time period, the user of the wireless device was located at the location for the  
10 associated time period;

11 means for displaying information on the determined locations and time periods where  
12 the user of the wireless device was located for the selected time interval.

1 41. The system of claim 40, further comprising:

2 means for determining scheduled events for the user within the selected time interval;

3 and

4 means for displaying information on the scheduled events within the time interval  
5 adjacent to the displayed information on the determined locations and time periods where the  
6 user was located for the selected time interval.

1 42. The system of claim 40, wherein the selected time interval comprises a selected  
2 time period of a user selected day.

1 43. The system of claim 40, wherein the selected time interval comprises a default  
2 time period for a current day.

1 44. The system of claim 40, wherein the information is displayed in a calendar  
2 Graphical User Interface (GUI).

1 45. An article of manufacture including code method for providing user location  
2 information for a personal information management program, comprising:

3 generating position coordinates of a wireless device and time information indicating a  
4 time when the position coordinates were generated, wherein a user is associated with the  
5 wireless device; and

6 processing the position coordinates and time information to determine information on  
7 locations and associated time periods, wherein for each determined location and associated  
8 time period, the user of the wireless device was located at the location for the associated time  
9 period.

1 46. The article of manufacture of claim 45, wherein the position coordinates and  
2 time information are generated at the wireless device, further comprising:

3 transmitting the generated position coordinates and time information to a server; and  
4 storing, with the server, the generated position coordinates and time information in a  
5 database, wherein the server processes the position coordinates and time information to  
6 determine the locations and associated time periods where the user was present.

1 47. The article of manufacture of claim 45, wherein the position coordinates and  
2 time information are generated at the wireless device, wherein the wireless device processes the  
3 position coordinates and time information to determine the locations and associated time  
4 periods where the user was present, further comprising:

5 transmitting, with the wireless device, the determined locations and associated time  
6 periods to a server;  
7 storing, with the server, the determined locations and time periods in a database.

1 48. The article of manufacture of claim 45, further comprising:  
2 providing a plurality of location boundaries defining multiple location coordinates;  
3 for each location boundary, providing a location description including information  
4 describing the location boundary;

5 for each generated position coordinate, determining whether the position coordinate is  
6 included in one of the provided location boundaries, wherein at least one determined location  
7 comprises one predefined location boundary including position coordinates, and wherein the  
8 information generated on the at least one location includes the location description for the  
9 predefined location boundary comprising the location.

1 49. The article of manufacture of claim 48, wherein at least one location boundary  
2 and associated location description is provided by:

3 receiving position coordinates from the wireless device defining one location boundary;  
4 and  
5 receiving a location description from the wireless device for the defined location  
6 boundary.

1 50. The article of manufacture of claim 48, wherein at least one location boundary  
2 and associated location description is provided by:

3 receiving location boundary and location description information from a transmitter.

1 51. The article of manufacture of claim 50, further comprising:  
2 associating, with the wireless device, the location description information with the  
3 generated position coordinates within the location boundary received from the transmitter; and  
4 transmitting, with the wireless device, the position coordinates, associated time  
5 information, and associated location description to a server, wherein the server processes the  
6 position coordinates and time information to determine location boundaries including the  
7 position coordinates, and wherein the information generated on the locations includes the  
8 location description provided by the transmitter for the location boundary comprising the  
9 location.

1        52.    The article of manufacture of claim 45, wherein position coordinates and time  
2 information are generated by multiple wireless devices, wherein each wireless device is  
3 associated with one user, further comprising:  
4            receiving position coordinates and time information from multiple wireless devices; and  
5            storing the position coordinates and time information in a database with information  
6 associating each position coordinate and time information with one user.

1        53.    The article of manufacture of claim 52, wherein processing the position  
2 coordinates and time information to determine information on locations and associated time  
3 periods further comprises:  
4            for each user, determining a series of position coordinates included within one  
5 predefined location boundary, wherein a location description is associated with each predefined  
6 location boundary, and wherein the determined location comprises the predefined location  
7 boundary including the series of position coordinates, and wherein the information generated on  
8 the locations includes the location description.

1        54.    The article of manufacture of claim 45, further comprising:  
2            processing the position coordinates and time information to determine whether a change  
3 in a series of position coordinates indicates a predefined activity occurring during an activity  
4 time period during which the position coordinates were generated;  
5            determining activity time periods that are within the selected time interval; and  
6            generating information on the predefined activities for activity time periods within the  
7 selected time interval.

1        55.    The article of manufacture of claim 45, further comprising:  
2 receiving a request for information on the user for a selected time interval;

3           determining time periods associated with locations that are within the selected time  
4   interval; and  
5           generating information on the locations and associated time periods that are within the  
6   selected time interval.

1           56.    The article of manufacture of claim 55, further comprising:  
2           transmitting the generated information to an initiator of the request for information to  
3   enable the initiator to display the location information and time periods where the user of the  
4   wireless device was located for the time interval.

1           57.    The article of manufacture of claim 56, wherein the initiator requesting the  
2   information comprises a program installed on a computer, and wherein the generated  
3   information is transmitted over the Internet to the computer.

1           58.    The article of manufacture of claim 56, wherein the initiator requesting the  
2   information is the wireless device, and wherein the wireless device displays the generated  
3   information for the requested time interval.

1           59.    The article of manufacture of claim 56, further comprising:  
2           determining scheduled events for the user within the time interval; and  
3           generating information on the scheduled events within the time interval to enable the  
4   initiator to display information on the scheduled events along with the geographic locations  
5   where the user was located during the time interval.

1           60.    The article of manufacture of claim 45, wherein each position coordinate is  
2   expressed as an x, y, z coordinate.

1        61.      The article of manufacture of claim 45, further comprising:  
2                providing information on the determined locations comprising one of at least text, audio,  
3        image, and video.

1        62.      An article of manufacture including code for generating a calendar for a  
2        personal information management program by:  
3                receiving selection of a time interval;  
4                for the selected time interval, determining position coordinates of a wireless device and  
5        time information indicating a time when the position coordinates were generated, wherein a user  
6        is associated with the wireless device; and  
7                processing the position coordinates and time information to determine information on  
8        locations and associated time periods, wherein for each determined location and associated  
9        time period, the user of the wireless device was located at the location for the associated time  
10      period;  
11                displaying information on the determined locations and time periods where the user of  
12      the wireless device was located for the selected time interval.

1        63.      The article of manufacture of claim 62, further comprising:  
2                determining scheduled events for the user within the selected time interval; and  
3                displaying information on the scheduled events within the time interval adjacent to the  
4        displayed information on the determined locations and time periods where the user was located  
5        for the selected time interval.

1        64.      The article of manufacture of claim 62, wherein the selected time interval  
2        comprises a selected time period of a user selected day.

1       65.    The article of manufacture of claim 62, wherein the selected time interval  
2   comprises a default time period for a current day.

1       66.    The article of manufacture of claim 62, wherein the information is displayed in a  
2   calendar Graphical User Interface (GUI).

1       67.    A computer readable medium for providing user location information for a  
2   personal information management program, wherein the computer readable medium includes at  
3   least one computer readable data structure comprising:

4            position coordinates of a wireless device and time information indicating a time when  
5   the position coordinates were generated, wherein a user is associated with the wireless device;  
6   and

7            locations and associated time periods, wherein for each determined location and  
8   associated time period, the user of the wireless device was located at the location for the  
9   associated time period, and wherein the locations and associated time periods are determined  
10   by processing the position coordinates and time information.

1       68.    The computer readable medium of claim 67, further comprising:  
2            a plurality of location boundaries defining multiple location coordinates, wherein each  
3   location boundary includes a location description including information describing the location  
4   boundary, wherein for each generated position coordinate, a determination is made as to  
5   whether the position coordinate is included in one of the provided location boundaries, wherein  
6   at least one determined location comprises one predefined location boundary including position  
7   coordinates, and wherein the information generated on the at least one location includes the  
8   location description for the predefined location boundary comprising the location.

1           69.    The computer readable medium of claim 67, wherein a determination is made  
2    of a series of position coordinates included within one predefined location boundary, wherein a  
3    location description is associated with each predefined location boundary, and wherein the  
4    determined location comprises the predefined location boundary including the series of position  
5    coordinates, and wherein the information generated on the locations includes the location  
6    description.

1           70.    The computer readable medium of claim 69, further comprising:  
2           information on predefined activities for activity time periods within the selected time  
3    interval, wherein the predefined activities are determined by processing the position coordinates  
4    and time information to determine whether a change in a series of position coordinates occurred  
5    during an activity time period during which the position coordinates were generated.

1           71.    The computer readable medium of claim 67, wherein each position coordinate  
2    is expressed as an x, y, z coordinate.

1           72.    The computer readable medium of claim 67, further comprising:  
2           information on the determined locations comprising one of at least text, audio, image,  
3    and video.